UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,217	11/18/2003	Roger Harris	08457-002005	6038
20985 FISH & RICHA	7590 01/05/2007 ARDSON, PC	•	· EXAMINER	
P.O. BOX 1022			HENLEY III, RAYMOND J	
MINNEAPOLIS, MN 55440-1022			ART UNIT	PAPER NUMBER
			1614	
SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
31 D	DAYS	01/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/717,217	HARRIS ET AL.				
Office Action Summary	Examiner	Art Unit				
	Raymond J. Henley III	1614				
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with	the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING. Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by sany reply received by the Office later than three months after the rearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNICA R 1.136(a). In no event, however, may a repl n. eriod will apply and will expire SIX (6) MONTH statute, cause the application to become ABAN	ATION. y be timely filed S from the mailing date of this communication. IDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	•	·				
, <u> </u>	This action is non-final.					
· · ·	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		,				
4)⊠ Claim(s) <u>1-41</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) 1-41 are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Oct the attached detailed office design to						
Attachment(s)	┌	(070.440)				
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 		nmary (PTO-413) Mail Date				
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date		rmal Patent Application				

Art Unit: 1614

Requirement for Restriction and Election of Species

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1 and 23-40, drawn to a method for increasing anaerobic working capacity in a tissue comprising administering a beta-alanylhistidine dipeptide and a glycine, an insulin an insulin mimic or an insulin-action modifier, classified in class 514, various subclasses depending on the particular compound(s) administered.
- II. Claims 2-4 and 41, drawn to a method of regulating hydronium ion concentrations in a tissue comprising administering a beta-alanylhistidine dipeptide and a glycine, an insulin an insulin mimic or an insulin-action modifier, classified in class 514, various subclasses depending on the particular compound(s) administered.
- III. Claims 5-22, drawn to a composition comprising a mixture of a glycine, an insulin, an insulin mimic or an insulin-action modifier and a composition comprising an amino acid or an active derivative thereof selected from the group consisting of beta-alanine, a chemical derivative of beta-alanine and a paeptide comprising beta-alanine, classified in class 514, various subclasses depending on the particular compounds present.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and/or II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the

Art Unit: 1614

product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, because the claimed product may comprise only of a mixture of peptides/amino acids, such could used in a materially different process, such as supplementing a diet as indicated in present claim 12.

Further, inventions I and II may be seen as being unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions clearly have different effects, i.e., increasing anaerobic working capacity in a tissue vs. regulating hydronium ion.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper. The different field of search would not only entail differing subclasses, but also differing concepts depending on the claimed objective to be achieved.

Also, performance of a complete and comprehensive search for any of the above grouped inventions would not necessarily result in a complete search of the prior art for the other method based on the evidence of distinctly different subject matter, mechanism of action, function or effect. Execution of a search encompassing each of Applicant's inventions would not only constitute an undue burden on the Examiner, but *consideration of the findings* of such a search in accordance with the requirements of the law under 35 U.S.C. §§ 101, 102, 103 and 112 would be unduly onerous.

Art Unit: 1614

Election of Species

This application contains claims directed to the following patentably distinct species of the claimed, generic types of compounds, e.g., a beta-alanylhistidine dipeptide, glycine, an insulin, an insulin mimic, an insulin-action modifier, (e.g., see claim 1), an amino acid, an active derivative thereof such as a beta alkaline, a chemical derivative of beta-alanine or a peptide comprising a beta alanine, (see claim 5). The species are independent or distinct because notwithstanding that applicants may have elucidated a common use for each of the types of compounds claimed, the prior art would view each separately and distinctly from the other compounds, e.g., insulin can be viewed as a compound that is structurally distinct from an amino acid. Each type of claimed compounds encompass numerous possible species and in order to focus the examination, the identification of a particular combination of specifically disclosed compounds is required

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1, 2 and 5 are generic with respect to the types of compounds.

Applicants are advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicants will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an

Art Unit: 1614

allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of an invention from groups I, II and III, (ii) election of a species of a particular compound or a combination of specific compounds to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Rejoinder Notification

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected

Art Unit: 1614

process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained.

Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond J. Henley III whose telephone number is 571-272-0575. The examiner can normally be reached on M-F, 8:30 am to 4:00 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Raymond J Henley III Primary Examiner Page 7

Art Unit 1614

January 2, 2007